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REVIEW

FEBRUARY 1943

TECHNIQUES AND TRENDS
IN THE IMPROVEMENT
OF READING

LEARY GRAY BETTS SMITH ARTLEY

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FEBRUARY 1943

Contents

PAGE

- 41 They "Look and Say"—Or Do They?
BERNICE E. LEARY
- 47 Trend In Remedial Work
WILLIAM S. GRAY
- 54 Systematic Sequences In Reading
EMMETT ALBERT BETTS
- 60 Shall We Teach Phonics?
NILA BANTON SMITH
- 68 Teaching Word-Meaning Through Context
A. STERL ARTLEY
- 75 The Educational Scene
- 77 Review and Criticism

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No. 2

They "Look and Say" - Or Do They?

BERNICE E. LEARY

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Reading competence presupposes a rich background of experience and a growing mastery of language. Dr. Leary writes delightfully of the broader aspects of child life of which reading is but a part.

—Editor

Everyone has his cherished possessions, and he cherishes them for singularly personal reasons. Among mine is a tiny book of not more than 50 pages—old, ugly, printed on gray pulpy paper in unpleasantly irregular and almost illegible type, and bearing the imposing title, *Reading Made Easy—Being an Easy and Expeditionary Method of Initiating Children into the Knowledge of the English Language—to Which is Added a Short and Correct History of Ireland—in Four Parts. A New and Much Improved Method.* The date is 1810.

Reading Made Easy—but clearly not easy enough. For 133 years since the publication of that little book, there have appeared book after book and series after series, each claiming in new and up-to-the-minute phraseology but with that same curious mixture of ostentation and

modesty that here at last is "an easy and expeditious method" of teaching children to read.

No one knows better than the primary teacher how much more justified is the claim of today's primary books than was that of my prized reader of 1810 with its laborious columns of *abs*, *acs*, *ads*, and of words—one syllable, two syllables "accented on the first," three syllables, four syllables, on to words of six syllables "promiscuously accented"—and to the triumphant ending, *A Short History of Ireland*. In these last half dozen pages is crowded all the real reading-matter the book offers, and from it the child of 1810 presumably discovered that "Ireland, anciently called Ierna, Cvernia, and Hibernia situated on the west of Great Britain, and divided from it by St. George's Channel, is 300 miles long and 150 miles broad."

One can only speculate on how much meaning and pleasure children derived from such content, or on how much interest later generations found in the phonetic absurdities of their day—"The cat was on the mat and the rat came in," or

"I see the moon, and the moon sees me; Spoon, Spoon, I cannot get my boot on."

Today's school readers, I have said, have a far more valid claim to easy reading. Their profusion of story-telling pictures, their minimum of text, and their everyday, intimate story content, demand of children only that they "look and say."

But *do* they "look and say"? If not, why not? And what can be done about it if they don't? The first question is, of course, infinitely easier than the second, and both the first and the second are easier than the third. Even a first-grader can answer the first, as one did, quite unconsciously, when I visited his room recently. There was a babyish look about him, for all his long scarlet corduroy trousers and striped sweater. It was the sixth week of school and the children were proving their ability to "look and say" by *doing*; that is, by coloring pictures of balloons labelled "brown," "red," "orange," "yellow," etc. As I sat down near him, he of the scarlet corduroys colored his last balloon, a red one, and began to color balloons of his own making, soft colors, this time—orchid, mauve, beige, pink—quite unmindful of the fact that now he was making balloons for balloons' sake and not to demonstrate his ability to interpret print. In the middle of a pink balloon, something happened in his thinking. Perhaps he realized the futility of his own enterprise, or perhaps he remembered that he was in school with a task to do, for with something between

a start and flourish he went back to his assignment. Rubbing his red color vehemently over the "R-E-D" still faintly visible on one balloon, he observed with a touch of superiority—"Some kids—why some kids don't even know pink."

The Tragic Incidence Of Failure

The failure of many first-grade children to "know *pink*" or "red" or "blue" or dozens of other first-grade words, and thereby meet first-grade requirements, has been brought to our attention by repeated investigations. Today the percentage of failure is markedly lower than it was twenty-five years ago when enrollments in first grade were 58 per cent higher than in second grade, chiefly because of repeaters. But it is still too high.

Translate first-grade failures into concrete terms, and see what they mean. Thousands of little boys and girls joyfully entering upon school experiences in September only to meet by January or June, first difficulty, then anxiety, fear, evasion, discouragement, defeat.

And why?

"They are just babies," we say. "They don't know what reading is all about. They will call a word anything. They get no meaning from pictures or print. They don't pay attention. They can't follow directions. They can't even talk plainly."

Our reasons are many, and most of them are valid enough. Most of them, too, show that children's language has not developed far enough to ensure him success in learning to read.

Language And Reading Readiness

How large a part language plays in reading readiness has been shown recently by Gates¹ in his study of factors related to succeed in learning to read. Among

¹Gates, Arthur I. "Reading for Beginning Reading" in *Reading for Learning*, Bulletin of the Association for Childhood Education, 1941.

some 15 factors identified as most important, 10 are aspects of language: ability to listen attentively; ability to listen to, remember, and carry out directions; ability to relate experiences, tell stories, describe objects, participate in discussions, converse, talk over plans; experience with word sounds; ability to think clearly; ability to see and interpret pictures; interest in and grasp of stories; awareness of and interest in reading; ability to find places in books; and ability to listen to part of a story and supply a reasonable ending.

It is obvious, then, that any program that aims to teach a child to read must rest on a strong foundation of language.

The most rapid growth in language, as the studies of McCarthy², Davis³, and others have shown, occurs before a child starts to school. From a state of oblivion to speech at birth, he advances steadily in language power to age four and one half, by which time he has discovered that speech is a convenient tool for asking questions, announcing and intensifying experiences by rhythmical chantings about them, identifying familiar elements in pictures or from a car window, telling stories *to* and *about* imaginary companions, reporting observations, and getting attention from adults.

Restraint has not yet entered into his language life. The rights of others are no concern of his. Their requests, commands, and admonitions fall on deaf ears. Whatever reflecting he does is done aloud. Whatever he plans, speculates about, dreams of, agrees to, or rebels

against are matters known to anyone who wills to listen. Not because he is consciously "telling the world," but because he gets pleasure and satisfaction from the use of language.

At the age of six or thereabouts, the child starts to school, equipped with some 2,500 different words whose meanings have been derived from a multitude of first-hand experiences—going to the store, trying on new clothes, dressing and feeding himself, playing with other children or with toys and pets, digging in the sand, fixing a broken toy, getting a haircut, riding in the family car, etc.; and equipped also with a steadily improving articulation and a growing consciousness of the social value of language in communicating with others, in getting his wishes fulfilled, and in acquiring power over a social group.

The sharp falling-off in development of language during the next few months and years should not be explained away too lightly. It is one thing to say that this falling-off of language growth is normal because it does happen, and quite another thing to prove that the falling-off is inevitable. If it is not inevitable, then the school should be able to do something to prevent it and to promote greater growth in the use of language and greater ease in learning to read.

There seems little doubt that for many children the school climate is not conducive to continued growth in oral language. The most obvious difference between school and home lies in the size of the social group which suddenly expands from a group of three to a half dozen, or in extreme cases to a dozen persons, to a group of 30, 40, even 50. To a timid child, the very sight of so large a group is terrifying, while only to the most aggressive or the least self-conscious does

²McCarthy, Dorothea. *Language Development of the Preschool Child*. University of Minnesota Institute of Child Welfare Monograph, 1930, No. 4.

³Davis, Edith A. *The Development of Linguistic Skill in Twins, Singletons with Siblings, and Only Children*. Institute of Child Welfare Monographs, No. 14. University of Minnesota, 1937.

there appear to be any opening for free communication.

In this larger community living, too, some members must necessarily listen while others talk. Some must carry out suggestions that others propose. Social amenities must now be observed and the rights of others be given recognition. If they are not, and if a child is reproved for ignoring social amenities, what effect may this have on his social development, on his language, and in turn, on his reading? Will the criticism arouse insecurity because he cannot understand his subordinate position? And if so, will he compensate for his insecurity by aggression, or will he find relief in sulking, self-sympathy, or some other form of unsocial behavior? Any circumstance that frustrates a child and gives rise to emotional tension deserves careful consideration lest it exert a negative influence on growth generally, and on language and reading particularly.

In the ordinary school, there is limited association with adults as compared to the amount of time formerly spent with parents, grandparents, or maids. A child's companions are now of his own age. Yet it is from adults that a child acquires precocity in language—wider vocabulary, better articulation, longer sentences.

What of the teaching practices in this new social climate? Is there anything in them to explain the hand-to-hand struggle that many children make of beginning reading?

Feeling The Need

The majority of schools in the country, it seems safe to say, introduce children to reading before they feel a genuine need for reading. Probably most of us remember Emmy Lou,⁴ who upon entering school

⁴Martin, George Madden, *Emmy Lou, Her Book and Heart*, Ch. 1. New York: Doubleday, Doran and Co., 1901.

at five, and a little late, smilingly but consistently resisted all efforts to teach her to read. Month after month went by, but Emmy Lou felt no urge to read. Keeping her slate clean was far more pressing than reading. Then came Valentine's Day, and with it a beautiful square envelope, "all over flowers and scrolls," and inside, a valentine "with reading on it," slipped into her desk by the little boy across the aisle. "It rested heavy on Emmy Lou's heart"—the reading. Studying it surreptitiously throughout the day, she discovered that "reading was made up of letters," and that she knew some of them. She would ask about the others, she decided, and then she would know what the valentine said! For the first time Emmy Lou *needed* reading, and for the first time she was beginning to learn. The rest of the way was easy.

A modern counterpart of Emmy Lou in recent fiction is Mark in Flannery Lewis's *Brooks Too Broad for Leaping*.⁵ Mark, too, went blithely through the early months of first grade feeling no disappointment that he had not yet been taught to read. Then came a day when he was to have his picture taken, and he disliked having his picture taken. It might be easier, he thought, if he wore school clothes and held a book in front of him. With a start he realized that he hadn't been given a book yet! Here was a problem. There was nothing to do but "sit down in his chair, by the stove, and think about it." To own a book and carry it home from school, to go places without moving from one's chair—perhaps there was something in this reading. He must learn and find out.

Delaying instruction until the Emmy Lous and the Marks develop a need for

⁵Lewis, Flannery. *Brooks too Broad for Leaping*, p. 42-43. New York: Macmillan Co., 1938.

reading or a curiosity about reading multiplies their chances for success and joy and satisfaction. At best, however, reading develops slowly, when measured in terms of known words. To the precocious child with a broad speaking vocabulary and a wide acquaintance with books, the first thin reading experiences are likely to bring disappointment. Miss Boo,⁶ you may remember, who "could read whole magazines page after page, upside down or right side up" when she "was only six inches tall," was saddened by the restrictions of her first book. "I *did* enjoy my own reading," she said regretfully. "I mean my *used-to* reading."

Background Experiences

Letting the Miss Boos tell enchanting stories of their own creation, report everyday happenings in their own way, and speculate on what will happen next in stories read to them, offers fruitful compensation for the necessarily thin first experiences with print. Recording oral reports on charts adds to the importance not only of the reports themselves but of reading, develops power to "look and say," and leads to a growing discrimination in the use of words. A first-grade group that I observed recently was carrying out an aviation unit. An airport had been built of large blocks and numberless toy planes "flown" in. Stories of airplane rides had been told and an ode to the airplane created:

"Airplane! Airplane!
Fly up in the sky
So high! So high!"

At the moment when class interest was flying highest, a minor tragedy occurred. An after-school "helper" accidentally bumped into the airport and tumbled the

blocks inside. A few weeks earlier, the accident would have taken the proportions of a crime in his six-year-old mind. But not now. His social responsibility had developed to the point where he knew that the accident must be "reported," and he begged the teacher to make a chart carrying a newspaper story that the other children might read the next morning. After grappling for words with audience appeal, he dictated the following story:

"Extra!

Airplane crashed.

The front end of the airport was blocked up.

Only one man saw the crash."

"*Man*," he explained, "sounds better than *boy*."

With conditions outside the school tending to curb oral expression or to cause it to deviate from accepted standards, we cannot neglect any opportunity that helps children develop in the use of language. At home, the continuous questioning and chattering that was considered "cute" at the age of four may be discouraged, if not suppressed, at the age of six. A new baby may be the center of attention. Radio-listening may be absorbing some of the six-year-old's former talking time, or attendance at feature-packed movies be filling long hours that might be given to social play. The comic magazine, instead of promoting social sharing, is being "read" in solitary fashion as the child sounds out for himself "arf," "beep," "woof," "whah," and other echoic words. Unconsciously these words come to flavor his everyday speech, and by the age of 8 his written expression, also, as Miss Brumbaugh's study has shown.⁷ His language is developing, but it is not the language

⁶Runbeck, Margaret Lee. *Our Miss Boo*, p. 202. New York: D. Appleton-Century Company, 1942.

⁷Brumbaugh, Florence N. "Comics and Children's Vocabularies," *Elementary English Review*, 16:63-64.

that he will need in handling the print of the school room.

Standards Of Evaluation

What are we to do to improve the situation—to promote continued growth in language and to improve children's ability and desire to "look and say"? In answer to this question, I suggest two broad lines of attack. The first is that of *evaluation*, a self-appraisal of teaching procedures by the use of such questions as these:

1. Have I divided my class into small groups to reduce social strain, increase the talking time of each child, and provide greater opportunity for me to talk personally with him?

2. Since children cannot communicate out of a vacuum, am I planning first-hand experiences that will stimulate speech—trips to store, garden, park, farm, woods, library, parking lot, civic scrap pile—remembering Cantor's evidence that in 9 excursions children may learn as many as 200 new concepts?⁸

3. Do I aim through these experiences to help children grow in the power of observation, since as Doctor Dolittle once said, "It takes a good observer to earn animal language"—including man's? Does *bird* come to mean more specifically *robin, parrot, sparrow, bluejay, cedar wax-wing; airplane* to mean *glider, bomber; boat* to include *canoe, barge, sail-boat, motor boat*, etc.?

4. Do I plan that children shall use words orally before reading them from book or experience chart?

5. Do I read aloud to children—easy stories that they soon can read for them-

⁸Cantor, Alma. "An Historical, Philosophical, and Scientific Study of Kindergarten Excursions As a Basis for Social Adaption and Reading Readiness." Unpublished Master's Thesis, University of Cincinnati, 1935.

selves; stories that provide new experiences; beautiful stories that serve as patterns for clear, simple, direct speech; and rhymes and verses that sharpen auditory perception? When time is crowded, do I let children read to each other, or do I invite a visiting parent to read to a small group for a brief period?

6. Do I take occasion to tell stories to my pupils—folk tales with their intimate once-upon-a-time beginnings and their satisfying, ever-after endings; or tall tales made up to suit the occasion?

7. Do I allow children *time* to talk about their own experiences, to tell stories from pictures, to repeat nursery rhymes, to dictate stories "out of their heads," and to create reasonable endings to unfinished stories? And do I help by allowing them time to think before speaking, by relieving tension and by suggesting words to the shy, tongue-tied child? And do I willingly sacrifice form and accuracy for spontaneity and freedom and good thinking?

8. Do I create situations in which questions may be raised and discussed naturally—how to make a rabbit pen, how many wheels to put on an engine, what to feed the goldfish, where to house a caterpillar? And do I use these questions to motivate reading?

9. Do I relate learning experiences to a child's stage of development, centering activities in a unit of work that to him is vital and important?

10. Do I refrain from starting a child to read until by careful inventory I know that he feels the importance of reading, that he wants to read, and that he has the language equipment necessary to "look and say" successfully?

11. Is the atmosphere of my room so natural and friendly, so unrestrained yet

socially considerate, that pupils are eager to express their ideas, their wishes, their dreams, and their feelings?

Co-ordinate with this first line of attack, *evaluation*, is a second, that of *investigation*—not more research of a cross-sectional kind, but long, longitudinal studies of the same children over a considerable period. Probably such studies can be done most simply by preserving in scrap-books or files, more classically labelled *Memorabilia*, all sorts of information about the growth of each child—information that shows his ups and downs in language and in reading, that points to the relationship between his language development and his success in reading, that shows his development socially, that records his language and reading needs at

different levels, and that indicates the gains made under different environments, through different activities, and with different associates in kindergarten, first grade, second grade, and so on.

With such data, we may hope to know better than we know now what is the maximum growth in language and in reading that a child can make, how to promote such growth, and how to use what we know of his development generally to ensure success in reading. Then, and only then, it seems to me, will the abundance of easy and delightful books now at our command, truly offer "an easy and expeditious method of initiating children into a knowledge of the English language—a new and much improved method."

Trends in Remedial Work¹

WILLIAM S. GRAY

University of Chicago

With his usual thoroughness and comprehensive view, Professor Gray surveys the results of the major investigations in the field of remedial reading. Of particular interest is his emphasis upon the multiplicity of causes of reading difficulty, and his distinction between clinical procedures and informal remedial instruction in the classroom.

—Editor

Abundant evidence has been secured which clearly supports the assumption that both mild and extreme cases of reading and spelling disability may be due to any one, or more, of various causal factors. Tests and observations show conclusively, for example, that poor achievement may be due to limited learning capacity, congenital or acquired neurological defects, conflicting cerebral tendencies, poor perceptual habits, ill health, improper glandular functioning, poor vision or hearing, abnormal emotional re-

actions, inappropriate environmental influences, failure of the school to adjust instruction properly to the capacity and needs of given pupils, etc. It follows that the astute diagnostician does not rely on a single explanation for marked deficiency in any of the language arts. We may safely conclude, therefore, that one of the significant trends of recent years has been rapid growth in our conception of the variety of factors that contribute to de-

¹ Read before the National Conference on Research in English. San Francisco, February 21, 1942.

iciency in any given subject. Whereas this fact complicates in a sense the problem of classroom remediation it at the same time makes it a more intriguing and challenging one.

New Methods Of Diagnosis

The recognition of the principle of multiple causation has been accompanied by notable developments in the scope and procedures used in diagnostic studies. The earliest published reports pertaining to disabled readers were made largely by surgeons and neurologists. It was natural that the scope of their investigations, the techniques of diagnosis used, and the interpretation of their findings should be dictated by their own professional interests and experiences. As new causal factors were recognized, diagnosis was greatly extended in an effort to identify more accurately the nature of the deficiency in given cases and related causal factors. Either a single individual attempted to become proficient in the use of various techniques of diagnosis or specialists from different fields co-operated in the study of specific individuals.

The latter trend is admirably illustrated in a five-year study which will soon be published by Mrs. Helen Robinson at the University of Chicago. The purpose of her study was to identify objectively the various types of physical, organic, mental, emotional and environmental factors that accompany severe forms of reading disability, to study their interrelationship, and to determine experimentally appropriate therapeutic or corrective measures. In order to insure the identification of most, if not all, of the causal factors involved in any given case, the clinical staff included a pediatrician, a neurologist, an ophthalmologist, an orthoptician, an ear, nose and throat specialist, a speech expert,

a specialist in glandular defects, an expert in social case studies, a psychiatrist, and a psychologist and reading clinician who was responsible for the administration and interpretation of various psychological and reading achievement tests.

As soon as a given case had been studied by all members of the co-operating staff, a conference was held in which the various facts secured were reviewed critically. As the analysis proceeded an effort was made to reach agreement concerning the possible causal factors and desirable corrective or remedial procedures. If any pathology or physical defect was discovered steps were taken to correct or eliminate it, if possible. Such corrections were usually made prior to any remedial work in reading in order to determine their effect, if any, on the reading interests and habits of the pupil. If several corrective measures were advised they were administered in controlled sequence in order to determine the effect of each. In the case of a child, for example, who was found to have an exceptionally low rate of metabolism, appropriate medication for a period of three or six months, or longer, was recommended. No additional corrective measures were adopted until the effect of this treatment was ascertained. Remedial work in reading was begun as soon as possible without interfering with the experimental procedures adopted by the medical staff, the psychiatrist or the social worker.

Obviously the procedures just described are laborious and time consuming. Only a limited number of pupils could be studied thoroughly during a five year period. The findings provide convincing evidence, however, that the causes of reading disability are varied and complex and can be identified accurately only in

the light of thorough diagnostic studies. The staff that participated in this investigation is convinced that further clarification of issues relating to seriously disabled readers will come from co-operative research in which many types of specialists pool their skill and judgment in identifying pertinent facts and in reaching conclusions. No longer can we rely on the results of studies which are based on limited diagnoses or interpret findings from a single point of view. For the same reason the recent effort to assign seriously disabled readers to a child-study clinic rather than to a reading clinic is, as a rule, a step in the right direction.

Classifying Poor Readers

The foregoing discussion suggests the need of a discriminating classification of poor readers. During the early period of interest in remedial work all pupils who fell noticeably below expectancy in achievement were assigned somewhat indiscriminately to remedial classes. This procedure resulted in grouping together pupils who were radically different in their characteristics and needs. In an effort to overcome this difficulty, at least in part, the practice was followed for a time of separating the less seriously retarded pupils from those with serious deficiencies. The former were frequently called "corrective cases" and the latter "remedial cases." This classification, however, failed to recognize differences in the capacity of pupils to learn. As a result, pupils of equal amounts of retardation in terms of age or grade expectancy, but who differed radically in mental age, were grouped together and treated alike. It soon became evident that this practice was unsound.

Distinct progress was made through the identification of the so-called "non-

reader," who was defined as a pupil of normal intelligence, or above, but had made little or no progress in learning to read. Effort to identify pupils who encounter unusual difficulty in reading was made also by Monroe who developed a reading index, based on a weighted average of mental age, chronological age, and arithmetic computation. Intensive studies of the characteristics of pupils identified by either of these methods revealed the fact that, as a rule, they were deficient also in spelling and not infrequently in other aspects of the language arts. This interrelationship between deficiencies in the various language arts lends support to the effort made recently in some centers to organize language arts clinics rather than reading clinics. As was pointed out earlier, the facilities of a child study department may be necessary, even when a language arts clinic is organized, in determining the specific causal factors that underlie deficiency in any aspect of this field.

The Criterion Of Mental Age

Within recent years additional distinctions have been made among poor readers through the wide use of mental age as a differentiating criterion. This procedure is based on the assumption that those pupils whose achievement in reading is up to expectancy on the basis of mental age are not remedial cases in the usual sense of the term no matter how far they may fall below expectancy on the basis of chronological age or grade placement. The view now prevails that such pupils are progressing normally in harmony with their ability and should be provided developmental training adjusted to their varying needs. The recent emphasis on reading problems of the slow learning child by Kirk and others is very timely and significant and is calculated

to make a genuine contribution to a well-conceived, comprehensive program in reading.

Another significant fact revealed through the use of mental age in identifying poor readers is that a surprisingly large proportion of the pupils who rank above the average in mental ability are distinctly retarded in reading when achievements quotients are used. Whereas many of these pupils may not need remedial instruction of the usual pattern they are often in urgent need of more challenging assignments and guidance which will insure growth in ability to make keen, discriminating interpretations and to apply what they read in the solution of problems. Not infrequently, bright pupils are victims of a poor start in reading or of some other retarding influence. A well-conceived instructional program should identify all pupils, both superior and inferior, who are not achieving in proportion to their capacity and should provide the types of reading activities and the kinds of guidance that will insure maximum growth.

Who Are Retarded Readers?

Assuming that mental age is a significant factor in evaluating pupil achievement, questions arise concerning the amount of retardation necessary to classify a pupil in the remedial category. In this connection, Harris has made the following interesting proposals.¹ Because of error in measurement "a child's reading ability should be at least six months below his intelligence level before we can be reasonably confident that his reading is definitely below expectation. A safe rule to follow is to select cases for remedial teaching in which the difference between reading age and mental age is at least

¹ Albert J. Harris. *How to Increase Reading Ability*. New York: Longman's, Green Co., 1940.

six months for children in grades four and five, or a year for children above the fifth grade." These standards seem reasonable if used as a general guide. The fact should be kept in mind, however, that special attention should be given to the needs of pupils just as soon as evidence develops, no matter how small, that a pupil is not living up to expectancy.

Through the use of mental ages and intelligence quotients notable progress has been made in differentiating poor readers into several significant types. Pupils of normal intelligence, or above, who encounter serious difficulty in learning to read have been identified and given specialized treatment. Pupils of limited intelligence who are below age or grade expectancy in reading, but who have an achievement quotient of 100 or better, are now recognized as making normal progress and given specialized treatment. Pupils of harmony with their level of advancement and their needs. Pupils of normal or superior intelligence whose achievement quotients are below 100 are provided challenging reading assignments and the types of guidance needed to bring their reading achievement up to expectancy. The extent of the deficiency of all other poor readers is recognized more or less accurately and classroom or clinical treatment provided according to their capacity, level of achievement and specific needs. Increasing differentiation in the treatment of poor readers is one of the very promising trends of recent years.

Three Types Of Remedial Work

The developments to which reference has been made have been accompanied by a tremendous increase in the number and variety of therapeutic or corrective measures used in remediation. A critical survey of the remedial procedures used

in any of the language arts shows that they fall readily into three broad classes which should be kept clearly in mind by remedial and classroom teachers. They can be illustrated easily by reference to the field of reading. In the first class belong the types of therapy that are designed to correct or remove conditions within the learner or in his environment that prevent or interfere with progress in reading. They include such measures as the correction of malnutrition, the stimulation of thyroid action, the removal of seats of infection, the correction of visual or hearing defects, the removal of disturbing environmental influences, the correction of an unstable emotional condition, and in some cases the provision of more time for rest or sleep. These steps and adjustments often occur as remedial instruction in reading proceeds. Not infrequently it is necessary to postpone such teaching for a time until some retarding or conflicting influence has been corrected or removed.

A second group of remedial measures include somewhat unique techniques of teaching that are designed to help overcome specific difficulties in learning to read or in establishing right habits. For example, Fernald experimented with the kinaesthetic method in the case of so-called non-readers. Monroe and others used the sound-tracing method in helping to overcome reversals and in correcting faulty vowels and consonants. Robinson, basing her procedures on the theory of perception advocated by Renshaw, made use of the flash meter in initiating accurate habits of word recognition. Taylor developed the metronoscope as an aid in establishing rhythmical progress of perception along the lines, in increasing the span of recognition, and in overcoming slow laborious habits of reading. Buswell

and Dearborn separately experimented with the use of films in providing controlled reading activities. These and other remedial measures have been developed in direct response to specific needs of poor readers and have been shown experimentally to facilitate rapid growth in individual cases. Observations show that they are being used with increasing frequency in basic reading instruction. Published reports of their use under such conditions indicate that they are often highly valuable. It appears therefore that one of the significant results of the vigorous emphasis on remedial work during the last two decades is a clear recognition of the fact that basic instruction in reading may be improved with a notable decrease in the number of so-called remedial cases.

A third group of procedures used in remedial work involves methods or techniques which teachers commonly employ in teaching pupils who make normal progress. They are the product of decades of informal and controlled experimentation to determine effective methods of teaching pupils to read. It has sometimes been estimated that such methods represent eighty or ninety per cent of the techniques now at the disposal of the remedial teacher. To do effective work, therefore, with pupils encountering serious difficulty in reading, teachers must be thoroughly familiar with current literature concerning the teaching of reading and with the various steps usually taken in promoting growth in various aspects of reading and at different stages of pupil development. In applying these techniques, however, the remedial teacher should keep clearly in mind that adjustments must be made constantly to provide for individual differences in interest, abilities and needs. The fact that a great

majority of the poor readers participating in recent classroom experiments made significant gains, provides striking evidence of the value of available teaching procedures when adjusted to individual needs. A further implication of great significance is that the number of remedial cases might be notably reduced through the use of appropriate techniques of adjustment in all reading classes.

*Remedial Work In Elementary
And High Schools*

Evidence of another trend in remedial reading is found in the number of remedial studies reported last year. A decade or more ago from twelve to twenty remedial studies in elementary schools were published annually. At the same time only a limited number of remedial studies in high schools were published. In the course of time the number of studies in the former decreased gradually and there was a corresponding increase in the latter. In the annual summary of investigations relating to reading for 1940-41 no remedial reading studies in elementary schools were listed. On the other hand, the number at the high school and college levels was about at its peak. At least three explanations are possible for the absence of such reports at the elementary school level. The first is that interest in the poor reader is declining. The second is that so many studies of remedial reading in the grades have been published that those who carried on such studies felt that there was nothing new to report. The third is that the center of interest in shifting to developmental types of training with adequate provision for individual differences. Observations and analyses of recent courses of study indicate that such a trend is very likely if it is not already a reality. Added stimulus to it is provided, on the one hand, by the results of recent studies

of the characteristics and needs of children and of the conditions under which growth takes place most effectively and, on the other hand, by the broader concept of reading which has been discussed widely during the last five years.

New Diagnostic Instruments

Although the center of attention in reading seems to be changing, wide interest continues in the improvement of the techniques of diagnosis and remediation. This is indeed fortunate inasmuch as there will always be some pupils who require intensive study and specialized treatment. One effort to improve diagnosis is directed to the development of reading tests that will identify more accurately than prevailing instruments the nature of pupils' deficiencies in reading. "The Diagnostic Examination of Silent Reading Abilities" by Van Wagenen and Dvorak and "The Co-operative English Test: Reading Comprehension" are promising examples in this connection. As indicated by the following list of skills that are measured by the latter test, aspects of reading which have previously received little attention in diagnosis studies are now being considered: "word knowledge"; "ability to select the appropriate meaning for a word in the light of its contextual setting"; "ability to follow the organization of a passage and to identify antecedents and references in a passage"; "ability to select the main thought of a passage"; "ability to answer questions which are answered in a passage but not in the words in which the question is asked"; "ability to draw inference from a passage about its content"; "ability to recognize the literary devices used in a passage and to get its tone and mood"; "ability to determine a writer's purpose, intent, and point of view; i. e., to draw

inferences about a writer." Obviously such tests will be of great value in determining the needs of pupils who are advancing normally as well as those who encounter serious difficulty.

A second effort to improve diagnosis is concerned with the criterion that should be used in differentiating remedial cases from those making satisfactory progress. Several writers, for example, have expressed criticism of the wide use made of mental age in diagnosis. Those who are interested in studies of the components of intelligence maintain that mental age is too broad a category for use in accurate classification. They recommend that only those components should be used which are directly related to progress in reading. After further research has been completed this may prove to be a very valuable suggestion. A second proposal comes from specialists in the field of child growth and development such as Olson and Hughes. They maintain that reading is one of many aspects of growth just as height and weight and dental age are aspects of growth. They assert also that reading follows the same general trend in de-

velopment as does the organism as a whole. According to this assumption the status of a pupil in reading should be determined by comparing his reading age with his "organismic age" which is the mean value of all the separate ages of the child. Before such a procedure can be adopted, assuming for the moment its validity, radical extension would be necessary in the types of records secured by elementary schools.

Improving Remedial Exercises

Vigorous effort is also being made to increase the value and efficiency of the remedial exercises used. This consists, first, of a clear definition of the type of growth or improvement desired. It involves, second, the selection of materials that have enriching or vital content and that make a strong appeal to the learner. It requires, third, the identification of methods or procedures that will stimulate the type of participation that will result in maximum growth in the direction desired. Although excellent remedial materials have been constructed in the past there is unlimited opportunity for constructive effort in this connection.

Systematic Sequences in Reading¹

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Professor Betts here provides significant evidence in support of a program of systematic reading instruction for ALL pupils, not by regimented procedures but by intelligent adaptation to individual needs. His thesis that reading is but one phase of the total language development of the child is in need of constant re-emphasis.

—Editor

Reading A Facet Of Language

Basic to differentiated reading instruction is the assumption that language development follows a describable general pattern and that within that broad pattern certain areas—such as reading—are developed systematically.

If this assumption is valid, then the educator has the responsibility of evaluating school practices in terms of the child's experiences with language. Oral language development, in the larger sense, will receive more attention in discussions of reading readiness and the development of subsequent language abilities than has been accorded it in professional literature on reading. More caution will be exercised by teachers in appraising individual readiness for each successive stage of language development. For example, pupils will not be forced into reading situations when they evidence inadequate control over oral language and they will not be forced into spelling and other written composition activities before their competence in dealing with certain reading situations has been demonstrated. When systematic development of language abilities is violated through regimented instruction, remedial activities become the order of the day.

Systematic sequences in reading, of course, are inter-related with sequences in

language. For example, the use of the dictionary is taught in reading, spelling, and elementary school English classes and any attempt to define a sequence for inducting the pupil into the effective use of a dictionary requires an investigation of sequences in the total language arts program.

Emphasis on the unity of the language arts has been forcefully called to our attention by a number of factors. First, remedial reading—the fad of the 1930's—has been useful in demonstrating that a reading disability is a part, in many instances, of a general language disability. Second, the increasing emphasis on semantics—the likely fad of the 1940's—has further accentuated interpretation as a major problem in communication. This trend appears to be breaking down artificial barriers erected among the language arts. Third, the gradually shifting philosophy of education is making intolerable the positions taken by those who assume that adequate language development can be brought about by the teaching of the language arts as separate subjects.

Approaches To The Problem

At least five broad approaches are being made to the study of systematic sequences

¹ A paper read before the American Educational Research Association meeting in San Francisco, February 23, 1942

in reading: First, studies of child development, with special reference to readiness for systematic instruction in reading. Second, studies of language development, with special reference to the reading facet of language. Third, investigations of factors contributing to the readability of materials. Fourth, surveys of literature reporting means of differentiating instruction. Fifth, an appraisal of the premises upon which classroom practices are based. This paper deals primarily with the latter approach.

Several studies dealing directly with differentiated language instruction are now being made by the Reading Clinic staff and their graduate students. Briefly, these investigations are serving the following purposes: First, to appraise the basic promises of those who regiment and of those who differentiate instruction. Second, to study the effects of regimented instruction upon learner development. Third, to secure criteria for the description of "levels" or types of differentiated language instruction. Fourth, to correlate investigations on the various facets of language development as one approach to the validation of systematic sequences on a differentiated basis.

Retardation In Reading

Frequently the observation has been made that systematic instruction is interpreted as being the regimented use of basal textbooks. This, of course, is not the case. The learner's general level of achievement and his specific needs must be appraised before the initiation of systematic instruction on a differentiated basis. When there is evidence of gross neglect of those pupils both above and below the general class average, then retardation can be expected to exist among those neglected groups. To be systematic,

instruction must be differentiated in terms of the capacities, abilities, and needs of the learners.

Dorothy Warner¹ investigated the retardation in reading among 825 sixth grade pupils of one school system. Reading achievement was measured by means of the National Achievement Tests; capacity, by means of the Otis Self-Administering Group Intelligence Test. By subtracting the reading age from the mental age, a crude index to retardation was secured.

Warner's findings may be briefed as follows:

1. The retardation for each class ranged from 5% to 51.3% of the pupils, the median being 19.5%. The figures refer to a retardation of 12 months or more.
2. In this school situation, most of the retardation in reading existed among those pupils with normal and above normal intelligence.
3. In general, more retardation was found among those pupils who achieved in reading at or above their grade level than among those who achieved below grade level.

Obstacles

In classroom situations where regimented instruction prevails, there appear to be several obstacles to systematic instruction on a differentiated basis. First, the major premises have not been carefully evaluated. Regardless of the extent to which facts are violated, there are inherent in these situations questionable assumptions. Likenesses are assumed where a wide range of differences and complexities exist. Compartmentalization of the language arts is "justified" on the

¹ Warner, Dorothy. *A Study of Retardation in Reading Among Sixth Grade Pupils*. Seminar Research Project. State College, Pa.: The Reading Clinic, The Pennsylvania State College, 1941.

basis of fragmentary rather than integrated language development. Credence is given to the certainty of grade placement of curriculum items, such as vocabulary, rather than to individual needs.

Second, available techniques and materials for the identification of learner needs are not capitalized upon. For example, the use of an informal reading scale and a series of basal readers for estimating "level" of reading ability frequently has not been considered. It is assumed that the only way to appraise growth in reading for guidance purposes is through the use of standardized tests. When such measures are not made available, the appraisal function of the teacher is defaulted. In short, there remains the urgent need to heed that age old admonition to "begin where the learner is because education increases individual differences."

Third, some teachers report that they are not given opportunities to select materials that meet the gross needs of the individuals within a class. In these situations, administrative or supervisory officers select sets of basal text-books—the same book for every pupil of a given "grade"—which are to be used as uniform prescriptions. While this should not cause the teacher to characterize the situation as hopeless, it does place a formidable obstacle in progress toward even low levels of differentiation. Briefly, the teacher needs more help from her supervisors and her professors of education in making continuous appraisal of pupil development through intelligent observations in learning situations.

Fourth, opportunities for observation of classroom situations in which various types of differentiated instruction are demonstrated are seldom available to a

great number of teachers in service. It is reported that since few lecturers are able to describe differentiated programs adequately, direct experiences should be made available. This should be a challenge to those engaged in teacher education, not only for the appraisal of their own demonstration facilities but also for the identification of desirable classroom situations in public schools to which teachers might be referred. Demonstration facilities appear to be as essential for teacher education as a hospital is for the preparation of doctors or a laboratory for the preparation of chemists and physicists.

Elementary School Practices

By using an extensive questionnaire-interview technique, Gladys Moulton Hilton¹ investigated the reported practices of fifty elementary school teachers in summer session attendance at The Pennsylvania State College. This study is especially significant for at least two reasons. First, most of the teachers were in attendance because of a desire for professional improvement. They were seeking help with their problems in reading. Second, they were associated with a number of other students sincerely interested in the premises basic to and in procedures for differentiating instruction. It is possible, and indeed probable, that the practices reported by these teachers are somewhat superior to those in the majority of classroom situations in the areas represented by them.

Hilton's findings may be summarized as follows:

1. *Departmentalization of Instruction*
76% of the teachers interviewed taught spelling in addition to read-

¹ A Study of Differentiated Language Instruction by Means of a Questionnaire—Interview Technique. Seminar Research Project. State College, Pa.: The Reading Clinic, The Pennsylvania State College, 1941.

ing, while 82% of the reading teachers also taught elementary school English. From these data, it appears that departmental instruction should not be an obstacle to the unification of language instruction in a majority of the communities represented.

2. *Grouping.* When asked, "Do you group your pupils in reading?", 90% replied in the affirmative. However, when the response was evaluated in terms of answers to succeeding questions, grouping did not result necessarily in differentiated reading instruction.

Only 31% of the teachers reported any attempt to differentiate instruction in spelling. Two per cent of them made use of teacher-made tests as a basis for grouping or otherwise differentiating instruction. In no case were standardized test data used for evaluating progress in spelling. The study list in a speller for a given grade was the prescription for *all* pupils in that grade.

Only 28% of those teachers who dealt with elementary school English as well as reading reported grouping as a means of differentiating instruction. Here again, a check on the meaning of these affirmative responses revealed that only 10% of the total number of teachers interviewed reported differentiation. The remaining 18%, reporting the use of grouping, provided every pupil of a given class with the same textbook prescription but encouraged "fast" pupils to participate in certain enrichment activities.

3. *Other Means of Differentiation.* In addition to grouping, 70 other means

of providing for individual needs were reported. 38% of the teachers reported that they provide individual help for pupils in distress. By and large, the chief concern was with the pupils at the lower end of the distribution in capacity and ability.

4. *Use of Capacity Tests.* In 48% of the situations, intelligence tests were given routinely and in 2% they were given only to special cases. With very few exceptions, only group tests were used and many of these placed a premium on reading ability. From these data it appears that the teacher interested in the larger problem of retardation and acceleration would be handicapped in her efforts.

5. *Achievement Tests.* 72% of the teachers reported that achievement tests in reading were administered routinely. One-sixth of these teachers did not know what tests were administered. In 41% of the situations where tests were used, a general achievement test was administered.

For 66% of the teachers achievement test data were kept on permanent records. In addition, 44% of the teachers kept records of individual progress. Individual pupil folders were kept by 22% of the teachers. These folders were used largely for filing tests and health records.

6. *Reading Materials.* 52% of the teachers were permitted to select books for use with their own pupils. In all other cases, the books were selected by an administrative or supervisory officer without a survey of pupil achievement levels or needs.

- a. *Basal Readers.*

In 96% of the classroom situations basal readers were used. Every

pupil in a given grade used the same basal reader in 66% of the classrooms, regardless of his needs.

b. Supplementary Readers.

92% of the teachers had access to supplementary readers. With two exceptions, the available supplementary readers reported were basal readers. From the interviews two significant pieces of information were secured: First, the major portion of the budget for instructional materials was spent on reading books, but entire sets of books were ordered for a given grade level so that all the pupils could be studying the same thing at the same time. Second, teachers often were aware of the inadequacies of regimented instruction, but they were unable to locate information and other types of help on the first steps necessary to break the lock step.

c. Poetry. Only 20% of the teachers required the pupils of a given grade to memorize the same list of poems. In these situations, the county superintendent or the local administrative officer provided the teacher with a list of requirements for each grade level. The two chief sources of poetry were basal readers and anthologies.

d. Newspapers. 64% of the teachers reported the systematic use of a school newspaper or a news bulletin board. Frequently, however, newspapers were used in the same regimented manner as basal readers were. That is, all the pupils at a given grade level were provided with the same edition of *My Weekly Reader*.

7. *Instructional Jobs in Reading.* 98% of the teachers reported that they attempted to develop specific reading abilities. An examination of the descriptions of these abilities (see Table I) reveals the emphasis given by these teachers.

TABLE I
Summary of Specific Abilities Receiving Major Attention.

ABILITY	PER CENT
Oral Expression	26
Word Recognition	
Sheer recognition	76
Rapid perception	86
Comprehension	90
Interpretation of punctuation	58
Finding answers to fact questions	58
Following directions	54
Contextual meaning of words	56
Selection and Evaluation	48
Organization	24
Retention	16

8. *Classroom Libraries.* All the teachers reported that they had some type of classroom library. Only 40% had building libraries and 64% had access to public libraries. However, only 24% of the teachers ever took their classes to the public library. 50% of them had worked out a plan for charging out the books. In 94% of the situations, the pupils administered the library. A trained librarian was available for consultation with the children in 30% of the situations. Eight per cent of the teachers set up requirements regarding the number of library books to be read.

9. *Pupil Progress.* 30% of the teachers reported the use of individual pupil progress charts. 44% kept records of individual needs.

Premises

Another approach is being made to the problem of systematic sequences in read-

ing through the investigation of the notions teachers entertain about reading. A sampling of five questionable assumptions that have been identified can be described as follows:

1. Retardation in reading exists only among those pupils who fail to achieve up to grade level as defined by means of a standardized test.

2. Grouping and any other procedure for differentiating instruction is done for the purpose of bringing the "low" achievers up to "grade levels."

3. Curriculum items can be given a final grade placement that dictates their learning by *all* pupils at a given grade level. For example, some of the teachers interviewed are not aware of the diversity of author opinions regarding the grade placement of spelling words. Our investigators are informed by these teachers that there is such a curriculum item as a "second grade" spelling word or reading word which should be learned by all second grade pupils.

4. Desirable language development can be achieved by the unrelated teaching of reading, speech, and written composition and spelling. For example, attempts are made to teach certain spelling words in grade two that have not been *previously* encountered in reading situations.

5. A pupil must have a mental age of at least $6\frac{1}{2}$ years to be ready for initial reading activities.

Until these and other assumptions are identified and adequately appraised, the teacher will continue to practice in the direction of regimented instruction. The systematic and orderly development of the language abilities of individual pupils will still be a matter of discussion and practice in research laboratories and in a few progressive public schools.

Summary

1. Reading is a facet of language; therefore, systematic sequences in reading require definition and validation in relationship to the total program of language instruction.

2. From the Hilton study of a selected group of teachers in service, certain conclusions appear to be valid:

a. The interrelationships among the language arts are not recognized in the majority of classroom situations.

b. There is a greater recognition of individual differences in reading than in spelling and elementary school English. Instruction is predominantly prescriptive and on a calendar dictated basis.

c. Teachers exhibit greater sensitivity to problems of retardation among those children below the class average than among those children above the class average.

d. Very little attention is given to the reading of newspapers, critical or otherwise.

e. In general, it appears that systematic reading instruction on a differentiated basis must be achieved, for the time being, through carefully prepared teacher's manuals for basal materials. It seems that here is the place for the description of systematic sequences in reading, if such notions are to be translated into practice.

3. Warner's Study further emphasizes the need for giving consideration to the reading needs of all the pupils in a given grade.

4. To avoid regimentation and calendar dictated learning, criteria of readiness for given sequential learnings in language are being identified and validated.

Shall We Teach Phonics?'

Readers will be grateful to Dr. Smith for this excellent survey of the development of phonics instruction and of recent research in this field. The author effectively distinguishes between the use of phonics as a basic method in beginning reading instruction, which she condemns, and its use as an auxiliary device in promoting pupils' ability to attack their reading vocabulary independently, which she approves.

—Editor

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How It Started

Historical research² reveals that phonics, proper, that is, teaching children the sounds of letters as a means of solving new words, first came into American reading instruction as a patriotic rather than as a pedagogic measure. Following the Revolutionary War, patriots were gravely disturbed because of the great diversity of dialects in different parts of the United States, so Noah Webster, author of the most popular readers of the period, conceived the idea of developing a uniform national language by teaching all school children the sounds of the letters of the alphabet, and how to combine these sounds in pronouncing words.

From the time Webster's Blue-Back Speller came into wide usage, about 1798 until about 1846, phonics was taught pretty generally according to Webster's ideas. In 1846 J. Russell Webb started the country by declaring that children could learn whole words from the beginning without having first memorized the names and sounds of letters. At that time he published his primer called "The New Word Method," which was the first reader to advocate the word method of teaching beginning reading. A few people adopted the word method at this

time, but the majority continued to teach the names and sounds of letters as the first step in beginning reading.

In the latter part of the nineteenth century, phonetic method and content became highly organized, systematized, elaborated. It was in 1889 that Emma Polard, chief proponent of the elaborate phonetic method published her manual advocating the memorization of long lists of "families," each family embracing a list of words containing a similar phonogram as ill, bill, hill, fill, kill, mill, pill, rill, sill, will, etc. The sound of each consonant was to be drilled upon and memorized as an isolated element. It was at this time that teachers began what later became the almost universal practice of holding up a flash-card on which "b" was printed and to which children were to make the group response "buh" and so on until all of the consonants had been covered.

This highly-systematized, isolated drill type of phonics predominated for a long period of time. Early in the nineteen-twenties, however, some educators began to question this method of teaching phonics. Two scientific investigations had been conducted, but these educators reasoned that this method of teaching phonics was contrary to principles of modern psychology and philosophy. Criticism began to arise, and like the

¹ Read before the National Conference on Research in English, San Francisco, February 21, 1942.

² Nila B. Smith, *American Reading Instruction*. New York: Silver, Burdett Co., 1932.

proverbial snowball, this criticism gained in proportion and momentum until it covered the entire country. As a result, in large numbers of schools the teaching of phonics became taboo; it was dropped entirely as a phase of instruction which was outdated, outmoded, intrinsically wrong.

Since 1930 the pendulum of phonics teaching has been slowly swinging back to a more normal position. There still are, however, large numbers of teachers in the elementary schools who do not give their pupils any instruction in phonics or other methods of attack. Many of those who do give such instruction at the present time are wondering if they really should teach phonics, if phonics is effective, if it is harmful; when instruction in phonics should begin; what methods should be used in teaching phonics. In this discussion I shall attempt to summarize the recent and important investigations in this field as they yield data which will give us guidance in meeting these practical problems.

The Arguments For And Against

First of all let us consider the fundamental questions: Shall we teach phonics? Is the teaching of phonics effective as a method of attacking new words? Is it harmful? One of the most recent and thorough-going studies which has a bearing on these questions was conducted by Agnew.³

Dr. Agnew listed the most common arguments advanced in favor of the teaching of phonetics; and the most common arguments advanced against the teaching of phonetics. His lists were as follows:

"The case in favor of phonetics. The

³ Donald C. Agnew, "The Effect of Varied Amounts of Phonetic Training on Primary Reading," Duke University Press, Durham, N. C., 1939.

following arguments may be said to sum up the case in favor of phonetic training:

1. Phonetic training has had a long history; during this period of years until quite recently, it has been provided in increasingly large amounts. Procedures that have been used in the teaching of reading for a century should be scrutinized very carefully before they are abandoned.
2. Phonetic training gives the pupil independence in recognizing words previously learned. This ability becomes steadily more important in connection with silent reading.
3. Phonetic training aids in "unlocking" new words by giving enunciation.
4. Phonetic training encourages correct pronunciation and enunciation.
5. Phonetic training gives valuable "ear training" in recognizing and differentiating sounds.
6. Phonetic training improves the quality of oral reading; for instance, in breadth control and in speech coordination.
7. Phonetic training improves spelling.
8. Phonetic training is a valuable background for shorthand.
9. Many cases of reading disability may be traced to deficiencies in word recognition and sound analysis. These disabilities are often overcome by remedial procedures involving phonetic training."

"The case against phonetics. The disadvantages attributed to phonetic training may be summarized as follows:

1. Phonetic training tends to isolate words from their meaningful function by emphasizing sound.
2. Phonetic training tends to lead to the neglect of context clues.

3. Phonetic training tends to sacrifice interest in the content of reading.
4. Phonetic training leads to unnecessarily laborious recognition of familiar words.
5. Phonetic training is impractical because of the nonphonetic character of English.
6. Phonetic training is unnecessary for many pupils since its advantages can be obtained without formal training.
7. Phonetic training encourages the breaking of words into unnecessarily small units.
8. Phonetic training narrows the eye-voice span.
9. Phonetic training tends to emphasize too explicit articulation."

In order to throw some light on the validity of these contentions, Agnew conducted a series of studies involving large numbers of children in the school systems of Raleigh and Durham, North Carolina. Agnew's conclusions in regard to arguments advanced in favor of phonics were:

The investigations have tended to support four of the arguments in favor of phonetic training. These arguments are that phonetic training when given consistently in large amounts (as in Durham): (a) increases independence in recognizing words previously learned; (b) aids in "unlocking" new words by giving the pupil a method of sound analysis; (c) encourages correct pronunciation; (d) improves the quality of oral reading. The investigations provided no evidence on the other arguments in favor of phonetic training.

Agnew's conclusions in regard to the arguments advanced against the teaching of phonics are as follows:

The study tends to show that a number of the objections to phonetic training have been exaggerated. In other words although the investigation offered opportunity for evidence in support of these objections, such evidence did not appear. There was

no evidence that large consistent amounts of phonetic training tend: (a) to sacrifice interest in the context of reading; (b) to result in the neglect of context clues; (c) to result in unnecessarily laborious recognition of unfamiliar words; and (d) to be unnecessary because the advantages attributed to phonetic training might be obtained without formal training. Some positive evidence indicated too that (e) phonetic training does not narrow the eye-voice span.

On the other hand, there are some data to show that large amounts of phonetic training tend to slow up oral reading. This is, in a sense, counteracted by greater accuracy in oral reading.

The investigations did not reveal striking differences in silent reading ability as between groups having large differences in amounts of phonetic training. There was no evidence that phonetic training decreases efficiency in silent reading.

The evidence resulting from Agnew's investigations would seem on the whole to strengthen considerably the position of phonics from the standpoint of supporting arguments for it, and meeting objections to it as these arguments and objections have been voiced in the past in terms of opinion only.

Are Phonic Ability And Reading Related?

Another investigation, conducted by Tiffin and McKinnis,⁴ had for its purpose "to determine whether, and to what extent, phonic ability, as measured by a reliable instrument, is related to reading ability as measured by certain standardized reading tests."

The investigation involved 155 pupils from the 5th, 6th, 7th, and 8th grades. Each child was given an individual informal phonics test in which he was asked to pronounce a list of 100 nonsense words. All children were also given the

⁴ Joseph Tiffin and Mary McKinnis, "Phonic Ability, Its Measurement and Relation to Reading Ability," *School and Society*, LI (February 10, 1940), 190-92.

Iowa Silent Reading Test, Elementary, Form A; and the New Stanford Reading Test, Form V. Correlations were computed between the results of the phonics test and the results of the two reading tests. The authors state: "These correlations show ability is significantly related to reading ability among the pupils studied."

In their discussion the authors say:

Though the present investigation shows that a functional mastery of the isolated principles of phonics is significantly related to reading ability, the authors do not conclude that reading should be taught by drill in the isolated principles of phonics or that such drill should necessarily be given in all cases of retarded reading. But it is felt that a program of reading instruction which does not, by direct or indirect instruction, yield a mastery of the principles of phonics is not accomplishing its full purpose . . . , the existence of even a few such cases [cases of retarded readers who have been helped by phonics] coupled with the evidence of the present study that phonic ability is related to reading ability, points to the conclusion that the pendulum may have swung too far and that we have been too much neglecting this phase of reading.

Currier and Duguid⁵ report an investigation involving two matched groups of children during their first two years in school. One group was given phonetic training, and the other group was given quick drills with perception cards instead of phonetic work. Later the experiment was repeated with a third grade. One of the most important conclusions drawn, after five years of experimentation, was that phonetic drills have real value for some children but are not essential to every child as a part of the daily program in the primary grades.

The practical implication is, of course,

⁵ L. B. Currier, "Phonics or No Phonics," *Elementary School Journal*, XXIII (February, 1923), 451-52.

that phonetics should be taught according to ability groupings, and that children who already possess efficient methods of attack should be excused from phonetic instruction and permitted to engage in other phases of reading which will be more valuable to them.

Sexton and Herron's investigation, and investigations conducted by Tate and others which will be discussed later in this paper, also give us evidence that phonics instruction is valuable. All of these investigations point to the general conclusion that phonics is effective if it is taught moderately to children who need it and as an integral part of a well-balanced program which gives careful consideration to the development of other necessary reading skills as well as word recognition.

Effectiveness Of Other Methods

Since my topic is the broad one of developing pupils' ability to attack their reading vocabulary, I should like to pause for a moment to discuss methods of attack other than phonics. An investigation conducted by the writer⁶ had for its purpose that of discovering, if possible, what methods of attack were used by 400 advanced first grade pupils to whom no phonics had been taught, but who in many cases were successfully attacking new words.

As a child read orally the teacher carefully observed his behavior when attacking a new word, and after he had solved it she questioned him minutely to ascertain his exact method of attack. Then she recorded the method on a blank provided for that purpose.

The result of this investigation revealed the following methods of attack and their frequencies.

⁶ Nila B. Smith, "The Construction of First-Grade Reading Material," *Journal of Educational Research*, XVII (February, 1928), 293-96.

Pupils solved the new words by:	CASES
1. Fitting them into the context of the sentence	68
2. Looking at an accompanying picture	67
3. Analyzing or synthesizing compound words	43
4. Analyzing a known word to get a smaller unknown word within	40
5. Generalizing a consonant and combining it with a known letter group	24

The last named method comes pretty close to being phonics; the others, however, are methods of attack which do not make use of the technique of sounding letters. Since these other methods of attack were used successfully by children in solving words independently, it would seem that we would be justified in offering a broad program of word recognition in which children would be given definite instruction in all of these methods of attack including phonics, and not just confined to phonics alone.

When Should Phonics Instruction Begin?

The Newark Phonics Experiment, as reported by Sexton and Herron⁷ has special significance in regard to the time of introducing phonetics. This investigation involved several hundred children who were followed in their progress from the 1B grade through the first half of the second grade. The conclusions drawn were to the effect that the teaching of phonetics functioned very little or not at all during the first five months of reading instruction, that phonetics instruction began to be of some value in the second five months, and that it was of great value in the second grade.

In a more recent investigation, Dolch and Bloomster⁸ report the results of a

⁷ E. K. Sexton and J. S. Herron, "The Newark Phonics Experiment," *Elementary School Journal*, XXIII (February, 1923), 451-52.

⁸ E. W. Dolch and Maurine Bloomster, *Elementary School Journal*, XXXVIII (November, 1937), 203-5.

study which they made involving children in each of two grades, grades I and II. Their conclusion was that:

Children with mental ages below seven years made only chance scores; that is, as far as this experiment indicates. A mental age of seven years seems to be the lowest at which a child can be expected to use phonics, even in the simple situations provided by these two tests. [Tests 1 and 2 of the Basic Reading Tests, Word-Attack Series. Scott, Foresman, Chicago.]

Obviously, the implication of both of these investigations is that definite instruction in phonics might well be delayed until the second grade. There is nothing in these data, however, which in my opinion at least would cause us to infer that nothing should be done in the way of developing phonics readiness preceding the seven-year level. Until investigations yield further data, common sense would suggest to us the advisability of providing simple informal and incidental experiences which call for auditory and visual discriminations throughout the kindergarten and first grade periods. Such experiences it would seem would contribute to a gradual ripening of phonic readiness which would enable children more easily to undertake work with the sounds of letters and groups of letters when definite instruction in phonics is undertaken in the seventh year.

How To Teach Phonics

Data in regard to the most effective methods of teaching phonics are exceedingly limited. Three recent investigations, however, make pertinent contributions to certain aspects of this problem.

For many years it has been customary for the teacher to teach the children a certain set of phonograms such as ay, ent, on, etc. Dolch⁹ questions this procedure

⁹ E. W. Dolch, "Phonics and Polysyllables," *Elementary English Review*, XV (April, 1938), 120-24.

and has conducted two studies to ascertain the degree of helpfulness which the teaching of such phonograms might offer in unlocking new words. In both studies he used as the basis of his analysis the 3,000 most commonly used words of the 16,000 polysyllabic words in the "Combined word lists by Buckingham and Dolch."¹⁰

The first study¹¹ discussed the question whether the important phonograms which have been identified by research and which are commonly taught in the primary grades can be of much help in sounding out polysyllables. The study showed that these twenty-four "important phonograms correspond to only 11.6 per cent of 8,509 syllables in a sampling of 14,000 running words in elementary science textbooks in arithmetic, history, and geography; that 6.8 per cent were accounted for by the endings ing, er, and ed; and that therefore only 4.8 per cent corresponded to the other twenty-one. (September, 1940.)" Dolch concludes: "If phonograms are not going to 'unlock' polysyllables, it is advisable to discover what the common syllables really are so that the schools may teach them."

Hence the second¹² study was directed toward an answer to this question. After making tabulations by two different methods Dolch came to the conclusion that:

Two methods of tabulation give different results and that frequencies, no matter how computed, range from high to very low and yield no satisfactory basis for drawing a line between common and uncommon.

Finally, admitting that a child does learn sight syllables and that common sight syllables could be taught, there remains the

¹⁰ R. B. Buckingham and E. W. Dolch, "Combined Word Lists," Ginn and Company, Boston, 1936.

¹¹ E. W. Dolch and Maurine Bloomster, *op. cit.*

¹² E. W. Dolch, "Sight Syllables versus Letter Phonics," *Elementary School Journal*, XLI (September, 1940), 38-42.

question whether letter phonics is not, after all, the more practical answer. . . Perhaps a well-developed skill in working out any syllable, common or uncommon, will give the child the best aid in attacking the host of polysyllables which he will always meet in his reading.

So in the light of this investigation, those teachers who are teaching their children lists of so-called "important" phonograms or "family words" might well question their procedure in this respect.

Other studies¹³ which have a direct bearing on methods of teaching were conducted by Tate and others. In the first experiment an effort was made to determine the relative effectiveness of two procedures: (1) the experimental group used a special period daily for formal instruction and drill in phonics; (2) the control group used the look-and-say, or homophonic method. The experiment extended over a period of eight weeks. The conclusions drawn from this experiment are as follows:

(1) Phonics instruction and drill, as judged by the results of the Gates Primary Reading Test, Type 1, is far superior to the look-and-say method in developing the ability to recognize words. (2) The results of Type 2 of the Gates test give a slight indication that the look-and-say method is superior to phonics instruction and drill in developing the ability to comprehend sentences. (3) Results obtained from Type 3 of the test show conclusively that the look-and-say method is superior to phonics instruction and drill in developing the ability to comprehend paragraphs of directions. (4) The use of as many as thirty-minutes daily for special phonics instruction and drill leads to an unbalanced development of the abilities to comprehend words, to understand sentences, and to grasp the meaning of paragraphs.

¹³ Harry T. Tate, "The Influence of Phonics on Silent Reading in Grade 1," *Elementary School Journal*, XXXVI (June, 1937), 752-63; also Harry T. Tate, Theresa M. Herbert, and Josephine K. Zerman, *Elementary School Journal*, XL (March, 1940), 529-37.

The results of this study would indicate then that the method of teaching phonics formally and drilling upon phonetic elements for a half hour daily is not an altogether desirable method to use in developing all-round reading ability. This method of teaching phonics and the large amount of time given to it did produce increased ability to attack words but at the expense of comprehension abilities.

Now let us see what the results are when phonics is taught incidentally as an integral part of the reading program. The value of this method of teaching and its relative effects both on word recognition and comprehension were revealed in the results of a study by Tate and others¹⁴ who compared this incidental method of teaching phonics with methods which made no use of phonics at all.

To quote from the authors:

This experiment extended over a period of two years. It involves two first grade classes containing 44 pupils at the beginning of the experiment. Thirty-four remained for testing at the end of the experiment.

In the experimental group no attempt was ever made on the part of the teacher or pupils to sound letters. In the control group the teachers imparted an incidental knowledge of the more essential elements of phonics, and the pupils were guided into the attitude of using this knowledge as an aid in pronouncing words that they were unable to master by the look-and-say method.

The conclusions drawn were as follows:

(1) That without employing phonics, either formal or incidental, as a medium of instruction, teachers can secure reading performances corresponding to those indi-

¹⁴Harry T. Tate, Theresa M. Herbert, and Josephine K. Zerman, *Elementary School Journal*, XL (March, 1940), 529-37.

cated by the norms of standardized tests, but (2) that the incidental-phonics method is much superior to the nonphonics method in developing the ability to recognize words and to comprehend the meanings of sentences and paragraphs.

Thus it will be seen that the method of teaching phonics incidentally, functionally, and as integral part of the reading program produced results in developing ability in word recognition and also contributed to rather than detracting from the comprehension abilities. The results of the two last described experiments reveal the superiority of this informal functional method of teaching phonics over either the formal method of teaching phonics or the "look-and-say" method in which no phonics at all is taught.

In conclusion we might sum up by saying that data resulting from investigations carried on up to the present time give us guidance in answering the questions proposed in this discussion as follows:

(1) Is phonics effective in developing pupils' independent methods of attacking their reading vocabulary?

Yes, it is effective in developing ability to attack words successfully as well as in improving accurate oral reading, and also in improving the comprehension of words, phrases, and sentences.

(2) Is phonics harmful?

If it is taught as an isolated drill activity for periods as long as a half hour daily, it may produce some harmful effect. If taught moderately and functionally, these harmful effects do not develop.

(3) Should instruction designed to develop independence in word recognition be confined to phonics alone?

Since children naturally make wide and successful use of such methods of

attack as contextual clues, comparison with pictures, analysis and synthesis of compound words, finding a little word within another word—then it would seem that we are justified in providing a broad program of instruction in which pupils are given practice in using all of these methods of attack, as well as in using phonics or the method of sounding letters.

(4) When should phonics instruction begin?

Children do not develop a phonic readiness which causes them to profit from formal phonic instruction until they are seven years old, or normally until they are in the second grade.

(5) What methods of teaching are most effective?

One investigation points to the advisability of departing from the practice of teaching children a set of phonograms, and points to the advisability of teaching them how to sound and combine all of the separate letters well enough so that they will be able successfully to attack any word, whether or not it contains one of the phonograms.

Other investigations revealed that the informal, incidental, functional method of teaching phonics produced results superior either to the "look-and-say" method, or the method in which phonics was taught by isolated drill procedures during a half-hour daily period set aside for that purpose.

Teaching Word-Meaning Through Context

This comprehensive and practical survey of the use of context clues effectively supplements Dr. Nila B. Smith's treatment of word-recognition through phonic analysis, in this issue.

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Meaning Of Context

Teachers of reading have for years made use of context clues, along with configuration clues, picture clues, and word analysis, as a means of developing independence in word recognition. In this sense context clues refer to what might commonly be called "hints" that lie within a sentence, which are used as a means of aiding the child in recognizing the meaning of a new or unfamiliar word. If, for example, in the sentence, "The boy stumbled and seemed about to fall," *stumbled* should be a word with which the child is unfamiliar, he is encouraged to read the remainder of the sentence, omitting the difficult word, while logically "guessing" as to what the word might be. In this sense context is defined by Perrin (7:163) as "the discourse that surrounds a word or passage that is being separately discussed."

In a broader sense, however, context clues refer to much more than merely the clues to meaning afforded by the other words that are closely associated with an unknown word. Let us take, for example, "We were unable to complete the job, for after several revolutions of the wheel, the dog broke." For our purpose let us assume that the child knows the meaning of every word in the sentence; that is, the common,

every-day meaning. In spite of this the sentence might not convey sense, especially as it involves the unusual meaning of "dog." It simply doesn't make sense to say, "the dog broke." Yet, if the child had seen his father reassemble a lawnmower wheel and had heard him refer to the "dog" as the device which regulated the action of the cutting blades, he would immediately have an idea of the full meaning of the sentence. One must get the full interpretation *through experience* with the thing in question. In other words, context clues may be experiential as well as verbal.

To the two types of context aids to meaning already mentioned, there might still be added a third, namely, that which is expressed in the author's tone, mood, and intent. Although one might be able to comprehend a paragraph or stanza of a poem on the basis of the objective sense-meaning alone, a complete, appreciative interpretation of the whole rests upon those subtle, subjective factors, the clues to which exist in the tone, mood, and intent of the writer.

Examples Of Contextual Aids

It is important that the classroom teacher be able to recognize the various types of contextual clues as a means of guiding the child to a full interpretation

of meaning. Moreover, it is more important that the child himself be able to recognize the various types of aids to meaning, so that he may use them independently and automatically to interpret the full sense-meaning of the sentence or paragraph, as well as the subtle implication.

It must be pointed out that the following classification of contextual aids to meaning is purely an arbitrary one containing a great deal of overlapping. The purpose of this grouping has been merely to organize context in such a way that they might be presented systematically to the child. The teacher must realize, however, that rarely will a particular clue exist in complete isolation.

1. Typographical aids
 - a. Quotation marks—The "minutes" of a meeting are usually written by the secretary.
 - b. Italics—The *minutes* of a meeting are usually written by the secretary.
 - c. Bold face type—The **MINUTES** of a meeting are usually written by the secretary.

It is obvious that these three devices are inadequate in providing a meaning for the word "minutes." They do, however, point out the word and emphasize the fact that here is a new word, or a common word in an unusual setting which needs to be studied or looked up in the glossary or dictionary. Gray and Holmes point out (2:83) that unless these devices are paralleled by illustration, explanation, or definition, as a means of satisfying the child's curiosity, they are of little value.

- d. Parentheses—The minutes (a written record) of a meeting are usually written by the secretary.
- e. Footnotes or glossary references—The minutes* of a meeting are usually written by the secretary. (At bottom of page) *minutes—a written official record of the proceedings.

These two devices are particularly valuable since a definite reference is made to the particular word. Not only do we have a direct reference to the word, but the explanation is usually superior to a dictionary definition since it refers to the word in the particular context in which it is used.

Little needs to be done by the teacher in teaching the use of context clues as expressed in parentheses and footnotes, since the meanings are so obvious. In respect to the first group of typographical aids mentioned, the teacher needs to capitalize upon the child's curiosity as aroused by the word, and supply the necessary meaning. These devices should be taught as "stop signals," or as a means of informing the child that here is an unusual use of a familiar word, the meaning of which must be secured through inference, or by the use of the dictionary.

2. Structural aids
 - a. Appositive phrase or clause—The fertilizer should supply plenty of vegetable matter, which by decaying furnishes *humus*, the food for plant life.
 - b. Non-restrictive phrase or clause—The decaying vegetable matter of the fertilizer will furnish *humus*, which is food upon which plant life depends.
 - c. Interpolated phrase or clause—*Humus*—the food for plant life—comes from the decaying vegetable matter of the fertilizer.

Structural or grammatical elements furnish very useful clues of meaning. In fact, grammar takes on meaning to children when they see that it has a definite function in aiding interpretation as in the sentences above. Sentences having troublesome words should be analyzed for these structural aids, and the children led to see that commas and dashes are often helpful warnings to go slowly for mean-

ing. Again, practice exercises might be constructed, containing elements like the above, and be used as the basis for class discussion.

3. Substitute words

a. Synonyms—The fertilizer should supply plenty of vegetable matter, which by decaying furnishes *humus* or vegetable mold. (The word "*humus*" is explained through the use of the phrase, "vegetable mold," which has similar meaning to the original word.)

b. Antonyms—There is a great difference between the important and the *trivial* in what he has said. (The meaning of "trivial" is expressed through the opposite of "important.")

Synonyms and antonyms are very important aids, and for skillful readers, furnish almost unconscious clues to meaning. The teacher might devise exercises somewhat like those above where similar and unlike words are used that directly or indirectly give clues to meaning.

4. Word elements

a. Roots—John was successful in the *aquatic* event. (Meaning of the word derived from the knowledge that the root, *aqua*, means water.)

b. Prefixes—After numerous tests, the inspector found the milk to be *sub-standard*. (Meaning derived from knowledge that prefix, *sub*, refers to under, below.)

c. Suffixes—The attorney was well versed in *criminology*. (Here the meaning may be derived from the knowledge that the suffix *ology*, means the science or knowledge of.)

Knowledge of common roots, prefixes, and suffixes are valuable aids to meanings of new words, and in this connection the knowledge of foreign languages has value in the building of English word meanings. A valuable exercise consists of studying word families, or words related in meaning to a particular word element.

This might be done by suggesting a word element; root, let us say, and having the pupils suggest all the words that are related, pointing out in each case the relationship. The pupils should be cautioned, however, that due to the devious history of many words, the present meaning may be only indirectly related to the original element, or vice versa. Witness for example, the word *pew* from the root *pod*. In this case both the present day word and its meaning are only indirectly related to the original element, and one can only in a very indirect way get a hint as to the meaning of the word.

5. Figures of Speech

a. Similes—The old car *lurched* forward like an anxious dog released by its master. (Meaning of "lurched" expressed in the simile "like an anxious dog released.")

b. Metaphors—You dare not *evade* the responsibility, for the promise you gave is binding. ("Evade" is subtly explained in the metaphorical use of "binding" in relation to promise. If you are "bound" to a promise you then dare not step aside or get away from (evade) the responsibility.

Figures of speech may be referred to as particular types of inferential clues. The contextual use of the simile, usually expressed after the words "like" or "as," is very easy to understand and usually requires only incidental mentioning by the teacher. Unless children have had instruction in the use of metaphor, it is usually best to treat clues to meaning that lie in that particular figure of speech as inferential clues (No. 7).

6. Pictorial Representations

a. Pictures—Egypt is often called the land of the *pyramid*. (Picture of pyramid at side of page.)

b. Diagrams—The *superheterodyne circuit* resulted in a great improvement in radio reception. (Schematic diagram in text.)

- c. Charts, graphs, maps—Learning will take place effectively until a *plateau* is reached. (Graphs at side of page illustrating a learning plateau.)

Valuable and obvious clues to meaning lie in pictorial representations which accompany the text. It is generally sufficient to point out to the child that a clue to the meaning of a troublesome word may be found in a chart, diagram, or picture. In science, particularly, the parts of an object, a flower, for example, are often designated by dotted lines connecting the parts and words. Every opportunity should be taken to utilize this device as a valuable aid to word meaning.

7. Inference

Sunlight is an accepted germicide, for even the most hardy bacteria will die in a short time under its direct rays. Not only will the sunlight kill germs, but it will prevent them from growing. (Meaning of "germicide" inferred from the rest of the sentence and following sentences through such words as "die," "kill," "prevent.")

Of all the contextual aids to meaning, those secured through inference are perhaps the most helpful. Inferential aids are particularly helpful since there are so many times where no typographical aids, punctuation, or familiar word elements offer help in giving an interpretation of the word and sentence. Though inference is most helpful in securing meaning, it is perhaps the least used. Hence, the teacher should give it special attention. In teaching its use, actual class texts in geography or history should be utilized from which the children are privileged to suggest words, the meanings of which are not entirely clear. They should then be encouraged to omit the word temporarily and see whether the meaning, or a close meaning, might not be extracted from the rest of the sentence.

Children should form the habit of inferring the meanings of words as a time saver rather than referring to the dictionary. There will be words, naturally, where the remainder of the sentence will give no help in meaning. In this case one will then refer to the dictionary.

8. Direct Explanation

Many objects are *bouyant* which simply means that they will float on the surface of the water. As you already know, cork or pine float about readily, and even a steel ship will not sink. (In this case the author is directly attempting to make clear the meaning of the unfamiliar word by explaining it and giving examples.)

9. Background of Experience

The *lumberjack* skids the logs on the *bobs* with the use of a *cant-book*.

In the above example it is apparent that a background of experience is necessary on the part of the reader for a full and complete interpretation of meaning. Where direct contextual aids are not given, the teacher should supply the basis for understanding through excursions, field-trips, pictures, films, slides, museum exhibits, models, and the like.

10. Subjective Clues

a. Tone—

Such a poor, old, gray-haired man as leader! To ask him to serve us again is to murder him. How can we impose ourselves as his worthless children upon such a paternal creature?

This statement, uttered by one who is upholding the virtues of a veteran leader with a record of honorable public service, but who, in the interests of health, should be permitted to retire, would possibly draw forth sympathetic assents from the audience. If, on the other hand, it were made by a politician in a sarcastic tone of one who should be forced to retire to give way to himself, it might be met with laughter. One can interpret the mean-

ing only through the context of the *tone* in which the utterance was made.

b. Mood—

All day she sits behind a bright brass rail
Planning proud journeyings in terms that
bring
Far places near; high-colored words that
sing,
"The Taj Mahal at Agra," "Kashmir's
Vale,"
Spanning wide spaces with her clear
details,
"Sevilla or Fiesole in Spring.
Through the fiords in June." Her words
take wing
She is the minstrel of the great out-trail.
At half past five she puts her maps away,
Pins on a gray, meek hat, and braves the
sleet,
A timid eye on traffic. Duly gray
The house that harbors her in a gray
street,
The close, sequestered, colorless retreat
Where she was born, where she will al-
ways stay.
("The Travel Bureau"—Ruth Comfort
Mitchell)

This sense meaning of this poem is incidental to the mood which the author is trying to express, and one can interpret it properly only through that context of mood—in this poem the mood of one living a common-place life, but dreaming of doing great things and seeing fine places.

c. Intent—

The final score with 509 softball players showed that 3 out of 5 preferred the flavor of Flavor-last gum.

The purpose of the writer of this quip is obvious, even without the phrase which might follow—"Get a package today."

In this last group of context clues one sees *meaning* as much more than that which lies within the pale of sense-meaning. To read even a simple newspaper account—especially today when propaganda is rampant—requires much probing below the surface if one desires a full interpretation. It is the prime responsi-

bility of the teacher to make the pupil aware of all the subtle implications found in news accounts, advertisements—in fact, in writings of any kind. Such questions as the following might be asked of the pupils to help them get below the surface to the real heart of the meaning. "How do you think the author would have *spoken* it?" "Is what he said what he obviously wanted to say?" "How do you think the author felt; what mood was he in?" "What can you read between the lines that wouldn't be apparent to the casual reader?" "What do you think the author would like to have us do after reading his paragraph?"

Use Of Context Clues

One of the most practical uses of context clues is that of helping the child extend his present vocabulary. The dictionary has a place in helping the children to a meaning of unfamiliar words, but teachers would do well to recognize dictionary limitations and to teach their children of them. It is an interesting and instructive exercise to take a text book that the children are using, or even the daily paper, and on a particular page have the children suggest words with which they are not entirely familiar. With the list on the blackboard, and the magazine or text at hand, the teacher should carefully read the sentence aloud, asking the pupils to note any clues within the sentence, or in those nearby, that might suggest the meaning of the unknown word. Where the children experience difficulty the teacher should furnish help by pointing out familiar word elements, structural aids, the use of synonyms, and the like. In this manner the pupils will become less dependent on the dictionary, using it only where contextual aids are not available, or where a more precise definition is desired.

Mention was made of the limitation of the dictionary in supplying word meaning. This should have further consideration. Were the meanings of words in a sentence separate and distinct like the posts in a fence, it would be possible to take the definition of each of the words, put them together, and arrive at the meaning. In this case "*fresh peach pie*" and "*fresh peach pie*" would add up to the same meaning, in spite of the fact that in one we are emphasizing the fresh peaches as distinct from canned ones; while in the other, a fresh pie as distinct from the one of a day-old, soaked crust. In this simple illustration it is apparent that the meaning *intended* by the author is more significant than the definition of the words. To put it another way, the meaning of a sentence is the result of the relationship, the interplay, that exists between the words, as well as the mood, intent, and tone of the author.

From this one can see that the sheer dictionary definitions might be inadequate to a full meaning that the author is trying to express. But surely a dictionary has some purpose, some value. What is it? Zahner in *Reading in General Education* (11:89) states the value and limitation of the dictionary well in the following words:

... The dictionary lists the literal sense-meanings of the word and some of the metaphorical-sense-meanings which have got into common use. It indicates the present boundaries of the sense-meaning, and within that field drives in several fixed stakes, useful as guide-posts. But it does not exactly place in this field the sense-meaning of the word in any given passage; nor can it give any hint at all of the other kinds of meaning the word may convey—tone, mood, or intent. The common idea that it is the dictionary that "defines" a word, or that gives it its meaning; that the dictionary is

the one and final authority as to what in any given instance the word is being used to say; that the matter of understanding and comprehension can be settled by reference to the dictionary, is a common error, and one that is directly or indirectly responsible for some of the common blocks and imperfections in communication and for questionable practice in general education.

True, the dictionary will continue to be a valuable reference book, but its many limitations should be recognized and the pupils led to see that the sentence context itself is at times the best clue to a full and complete meaning.

In spite of the fact that word relationships and, in some cases, the dictionary itself may be utilized as aids to meanings, it must be pointed out that neither the context nor the dictionary *gives* a particular word *meaning*. In the final analysis "meaning" comes only through the combined experience of the writer and the reader. As Zahner points out (11:91) "The narrow use of 'context' as other words printed in the passage . . . is simply the clue to the present situation." This makes apparent the responsibility of the teacher in supplying a background of experience as a basis for complete understanding, in other words, supplying referents. Though teachers of primary grades have utilized direct and vicarious experiences to a certain extent, teachers on the upper levels have by no means made sufficient use of them, with the result that much of the learning is sheer verbalism.

As was implied at the outset, the term context clues has been extended to include not only the words that surround a given word, but also those clues to meaning that exist in the past experience of the writer and reader, and those subtly expressed in the tone, mood, and intent of the writer. Moreover, it is not only

imperative that children know of the existence of context clues, but that they utilize them automatically in their everyday reading. Only by so doing will they be able to transcend ordinary sense-meaning, and come to a complete understanding and full interpretation of what is being read.

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The Educational Scene

In promoting its plans for Inter-American education, our government needs the aid of teachers of English who have had experience in working with children from foreign-language homes. The National Council is building up a list of teachers of English so qualified, so that they can be consulted for occasional or frequent advice, as the development of the Council's Pan-American Education program may require.

If you have had any experience teaching English to foreign speaking students—elementary, secondary, or college—will you help us by writing on a postal card

your *name* and *address*, the *foreign language* involved, and the *grade* level?

Mail the card either to the Council office or to Dr. Rachel Salisbury, Milton College, Milton, Wisconsin, of the Council's International Relations Committee, which is co-operating with the U. S. Office of Education, Division of Inter-American Educational Relations, and with the Office of the Co-ordinator of Inter-American Affairs to promote better understanding through the improvement in and extension of the use of the languages of our hemisphere.

In an effort to determine the wisdom of the extensive use of preprimers in the early stages of reading, Miss Louise G. Carson, of the Beaufort, South Carolina, Elementary School, recently made a page-by-page tabulation of eleven widely used preprimers to determine the degree of overlapping of the vocabulary. Her conclusions, published in the December, 1942

Elementary School Journal include the following: "Extensive reading of pre-primers should be postponed to the time when a child is able to read at the primer level with some degree of ease. Extensive reading should then be both possible and profitable . . . It seems advisable to follow the preprimers of a particular series with the primer of the same series to the point where difficulty is manifested and then to switch to a series with as high a degree of overlapping vocabulary as possible (other things being equal)."

The report contains no evidence on children's performance with pre-primers.

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In a controlled experiment in spelling with seventh- and eighth-grade pupils in Lucas County, Ohio, W. S. Guiler and Gilbert A. Lease found that gains made by pupils given a systematic program which first discovers words that are difficult for the class and for individuals and then identifies the hard spots in the difficult words were greater than those made by pupils receiving conventional class instruction in spelling. The study was reported in the December, 1942, *Elementary School Journal*.

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Teachers who desire to promote understanding of the peoples of the United Nations will find interesting information on recent developments in two attractive monthly magazines. The first, dealing with Latin America, is *The Inter-American Monthly*, 1200 National Press Building, Washington, D. C. Subscription price, \$3.00 per year. The second is *Soviet Russia Today*, 114 East 32nd Street, New

York City. Subscription price, \$1.50 per year, including a free wall map of the Soviet Union.

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The U. S. Office of Education and the Office of the Co-ordinator of Inter-American Affairs recently initiated a project involving thirty-one centers throughout the United States for the study of the other American republics. A report of the work of these centers, including experiences of elementary school classes seeking a better understanding of Latin American countries, is published by the U. S. Office of Education under the title, *Inter-American Education Demonstration Centers*.

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Helpful pamphlets on radio education are published by Evaluation of School Broadcasts, Ohio State University. One of them, *Radio in Informal Education*, by Hazel L. Gibbony and I. Keith Tyler, contains reports of workshop conferences attended by numerous organizations interested in the problem. Price, 15 cents. Another, *Teaching Radio Program Discrimination*, by Irving Robbins, includes practical descriptions of classroom procedures in the intermediate grades. Price, 10 cents.

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United China Relief of 1790 Broadway, New York City, announces that it will financially assist a children's progressive school that was established near Chungking in 1939 by Dr. W. T. Tao.

Dr. Tao became internationally known to educators in 1934 because of his "Little Teacher" movement. This started in a school near Shanghai where he taught,

free of charge, such underprivileged children as street urchins, and the children of peasants and coolies.

The only tuition exacted from pupils by Dr. Tao in this unique school was the promise that each student would impart the lesson of the day to someone else. Soon scores of factory workers, coolies, and illiterate old people were receiving, from the children, their first instruction. The movement spread throughout China.

Dr. Tao's school at Peipei, twenty miles from Chungking, is devoted to the development of creative talents in children of exceptional promise. United China Relief's financial aid to this school, which started with a \$3,000 quarterly grant, was sent to Dr. Tao through China Aid Council of United China Relief—an agency devoted primarily to the care of China's children and orphans.

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Because of war conditions, the annual Conference on Reading Instruction sponsored by the Reading Clinic staff of the School of Education, The Pennsylvania State College, at State College, Pennsylvania, will not be held in April, 1943 as previously announced. Instead, a special seminar on Differentiated Reading Instruction will be conducted by Dr. E. A. Betts during the week of August 9 to 16 as part of the regular summer session's offerings. Seminar discussions will be supplemented with demonstrations. Emphasis will be placed on procedures for the study of learner needs and for meeting those needs in classroom situations. Outlines for the seminar may be secured from the Reading Clinic secretary.

Review and Criticism

WAYS OF THE TWELVE-YEAR-OLD

MANY MAGAZINE articles and books have been published during the past fifteen years for the purpose of aiding parents to understand and to make more effective contributions to the development of their children. Rose Zeligs' book, *Glimpses into Child Life*,¹ is such a book; it attempts to explain, for the average parent, the twelve-year-old child in the home, the school, and the community. The book is based on the results of questionnaires and interview studies made of the attitudes, feelings, and ideas of groups of sixth-grade children.

The book is divided into five parts, giving "glimpses into child life in the home, the school, and the social world, showing how these forces play upon the child. The fourth section deals more specifically with the child as a distinct individual, in interests, desires, dreams and ambitions. The last section consists of tests for parents and children." (p.x.)

In these various sections Miss Zeligs speaks as a teacher of sixth-grade children and as a person interested in helping parents. Perhaps her greatest fault as an author lies in her enthusiasm for her mission. Her book is simply written, it reports only the results of her tests and questionnaires, and, outside of her chapters on "Your Child Needs Sex Instruction" and "Your Child's Letters," no bibliography or suggestions on books which would be helpful to parents are given. The style is direct but somewhat

monotonous and domestic. The parent is never left in doubt either as to the right method for solving the problems of children or of Miss Zeligs' authority in making her pronouncement.

Extensive use is made of the direct question and the positive answer, such as "Have you a favorite child in your home?" (p. 28); "Is corporal punishment ever justified?" (p. 54); "Who is boss in your family?" (p. 60); "What can parents do?" (p. 219); or "Aggressiveness is a good quality." (p. 20); "Children are great imitators." (p. 21); "Respect the child's individuality." (p. 219.) Questions such as these and their related answers tend to over-simplify and narrowly interpret the many complex problems involved in the quotations.

Three criticisms might be directed against the book. (1) In spite of the emphasis and apparent concern about the twelve-year-old child, the implications behind this emphasis are never made completely clear to the reader. Are twelve-year-olds different from eleven-year-olds or thirteen-year-olds? Is this a special age? Should parents be forewarned and prepared for this period? (2) The apparent dependence upon rather superficial inventories for practically all the material reported and interpreted to parents. Parents and teachers might receive the impression that the application of the tests described in Part Five of the book is either the only way, or at least a fundamental way, of learning about one's child or pupil. It is true that popular magazines have made the answering of such

¹ New York: William Morrow and Company, 1942. Pp. vii 442. \$3.00

tests an interesting pastime, but it is not likely that the guidance program for a child should be based upon the findings of any tests of this kind. (3) The oversimplification of children's problems and their solution. While Miss Zeligs makes many practical suggestions and points out many serious problems frequently overlooked by parents, the reviewer is not sure that the "insight" gained by a parent through reading this book would lead to the kind of understanding of a particular child which would build a sound basis for effective long-time guidance.

The use of the "then and now" mode of presentation in discussing present elementary schools and present concepts of discipline may not be the best way to give to a parent a clear, balanced understanding of our present educational program.

Schools and their programs vary so widely from one another, even in the same city, in achieving the same desired objective, that it would be rather difficult for any parent to understand modern programs of elementary education from reading Miss Zeligs' book.

There is much helpful information in the book and Miss Zeligs is sensitive to many of the important problems of real concern to children. If parents are made aware of some of these problems the existence of the book is amply justified. The reviewer is not sure, however, how much help parents are given, through reading Miss Zeligs' book, toward becoming more competent to attack these problems.

—VIRGIL E. HERRICK
The University of Chicago

FOR BOYS AND GIRLS

Twelve Bright Trumpets. By Margaret Leighton. Illustrated by Frank Dobias. Boston: Houghton, Mifflin and Co., 1942. Pp. 172. \$1.28

Twelve episodes from the Middle Ages, each introduced by a short explanation of the events that formed the setting. The author has succeeded in bringing the middle centuries to life and in giving to her characters a flesh-and-blood kinship her readers will enjoy. It is particularly suited to the child over ten.

When I Grow Up I'll Be a Flyer. New York: Lothrop, Lee and Shepard Co. Pp. 41. \$1.25

The young reader is introduced to the full story of blind flying, parachute diving, radio, code messages and all the details of aviation which absorb the interest of all modern children. The book

also serves admirably as a source of vocational information for the retarded reader, or the mentally retarded child.

Air Patrol. By Henry B. Lent. New York: The Macmillan Co., 1942. Pp. 171. \$2.00

The story of young Jim Brewster who flies for the U. S. Coast Guards after graduating from the Coast Guard Academy at New London.

Children who have reached or exceeded approximately fourth grade reading ability will enjoy *Air Patrol*.

Andries. By Hilda Van Stockum. New York: The Viking Press, 1942. Pp. 192. \$2.00

How "bad boy Andries," an unwanted child, makes a vain attempt to adjust himself to the demands of an aged uncle who

adopts him. A healthy, normal boy who gets into mischief only through an abundance of energy with no legitimate outlet, Andries claims the sympathy of the Dykstra family, who with four children of their own, understand the boy's needs and give him the affection he seeks. For the child in the intermediate grades.

Daughter of Thunder. Grace Moon. New York: The Macmillan Co., 1942. Pp. 84. \$2.00

A beautiful picture of ceremonies and traditions that color the pattern of present-day Indian living. Little Doleh, Daughter of Thunder, although only twelve years old, demonstrates her bravery and quick thinking in saving her grandfather from the vicious plans of Big Fox. The life of the mesa which unfolds as Doleh lays her plans is picturesquely set forth. For children of third to fifth grade reading ability.

FOR THE TEACHER

The Use of Test Results in Diagnosis and Instruction in the Tool Subjects. Educational Records Bulletin No. 18 (Revised). By Arthur E. Traxler. Educational Record Bureau, 437 West 59th Street, New York.

The *Bulletin* contains an annotated bibliography of tests in reading, arithmetic, language usage, spelling, and handwriting. Charts on the use of the tests in each field cover "Type of Disability," "Diagnostic Procedure" (*i.e.*, which tests to select), and "Suggested Types of Remedial Treatment."

The Use of Tests and Rating Devices in the Appraisal of Personality. Educational Records Bulletin No. 23 (Revised). By Arthur E. Traxler. Educational Record Bureau, 437 West 59th Street, New York.

This *Bulletin* contains a substantial essay on the procedures which are used for appraising personality, an annotated bibliography of tests, a chart on the use of the tests in the diagnosis of personality traits, and a bibliography.

For Teacher Education Classes:

POLICIES AND PRACTICES IN THE IMPROVEMENT OF READING

By BETTS, GATES, GRAY, HORN, LEARY, SMITH, and others
(Including the symposium on reading from the November, 1942, *Review*, and articles from this and recent issues of this magazine.) 50 cents, postpaid; 40 cents each for ten or more.

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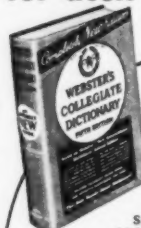
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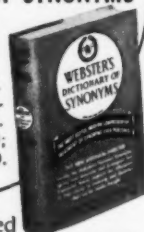


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